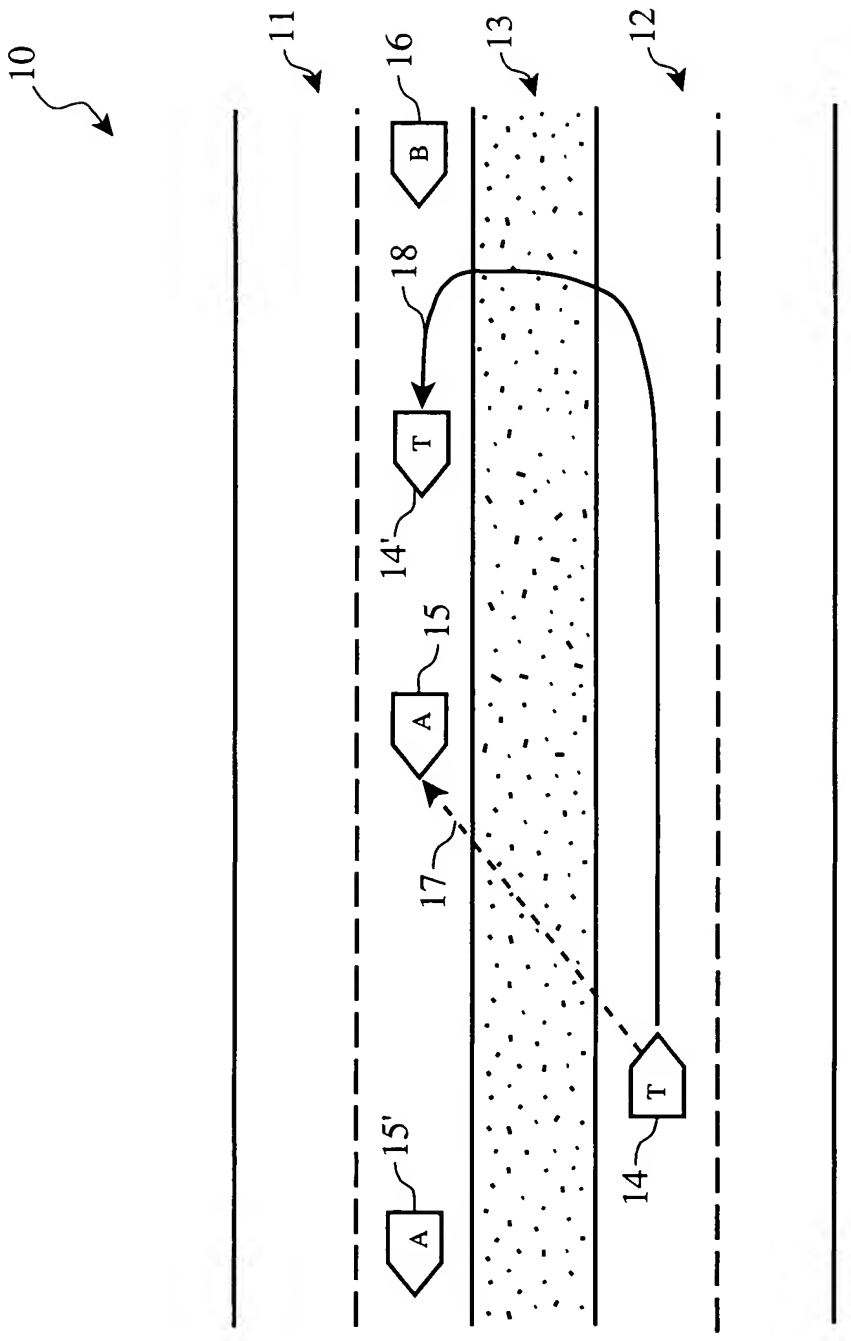

Figure 1

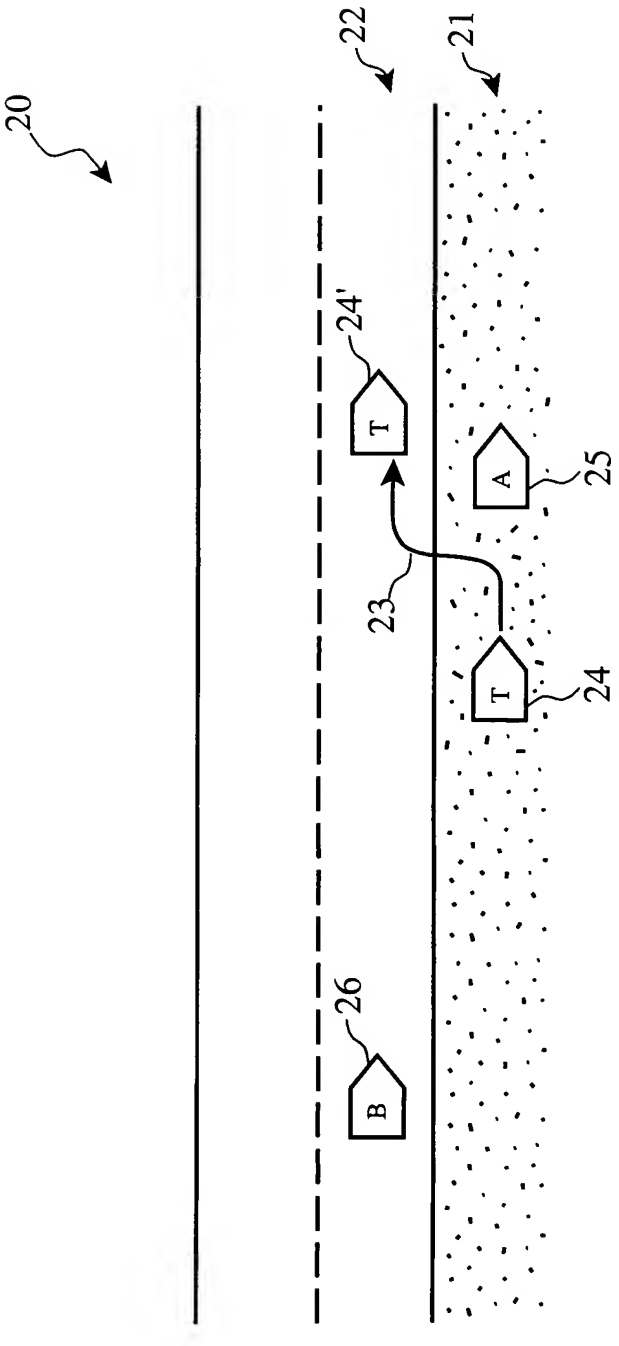

Figure 2

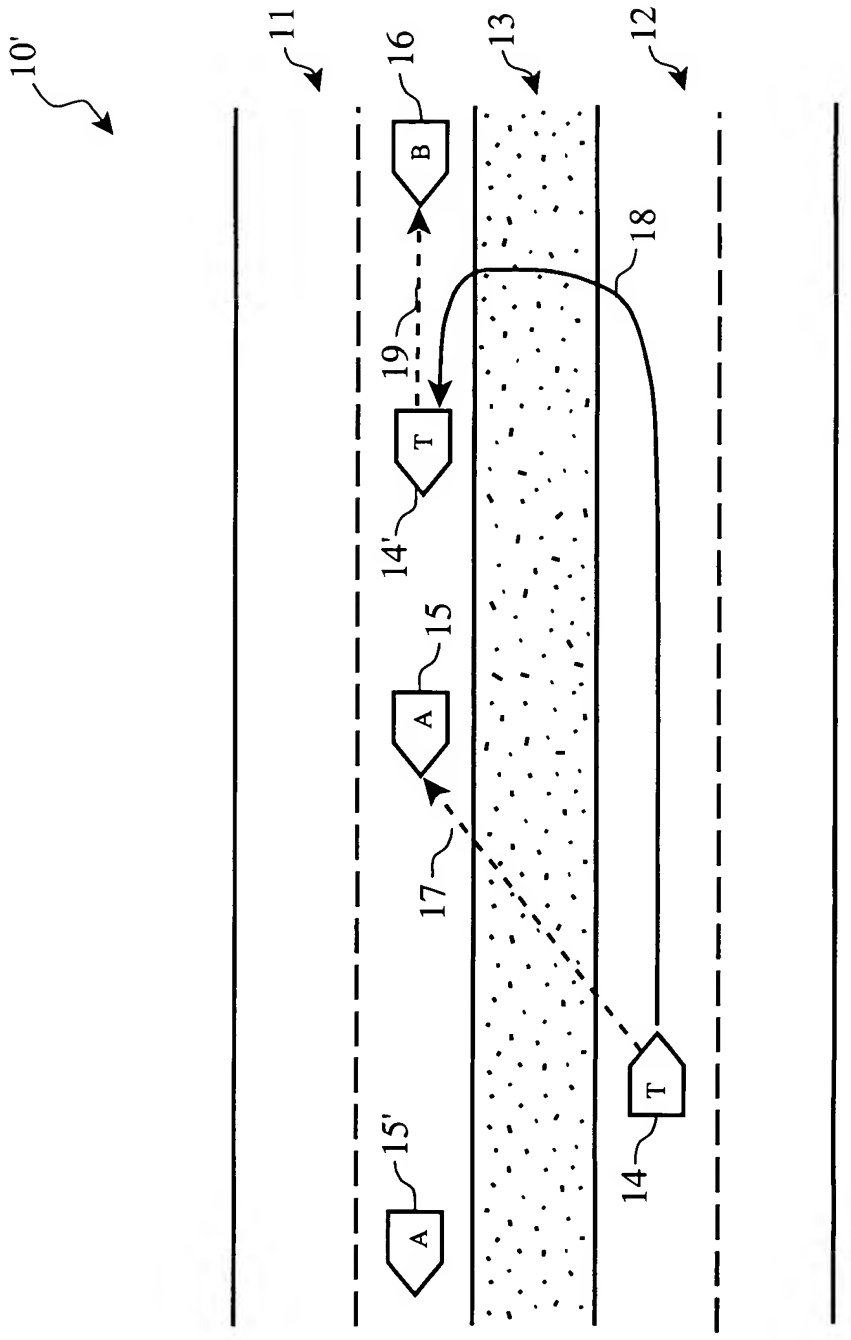

Figure 3

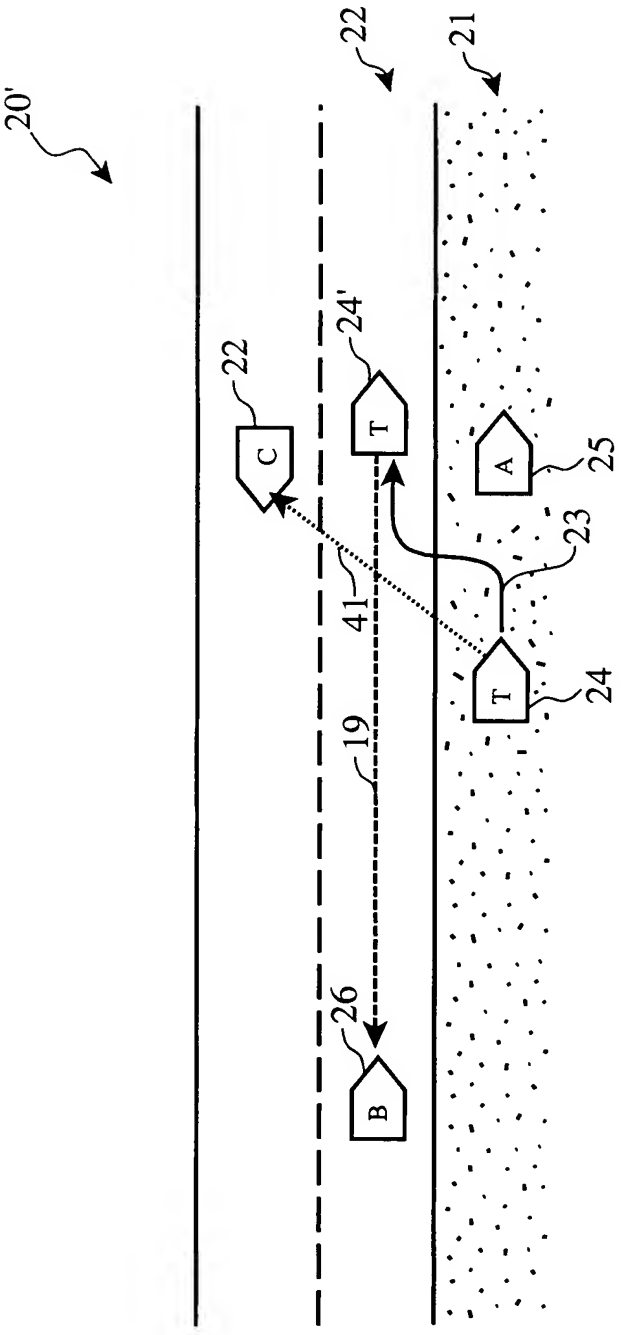

Figure 4

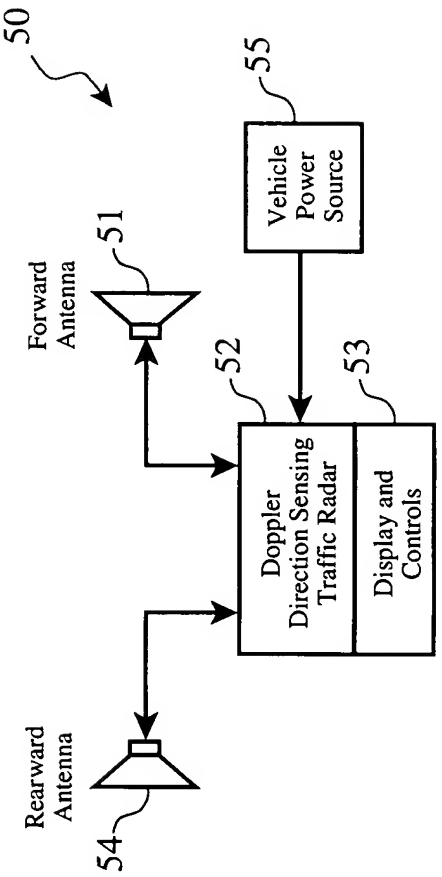
50
55
Vehicle Power Source
51
Forward Antenna
52
53
Doppler Direction Sensing Traffic Radar
Display and Controls
Rearward Antenna
54

Figure 5

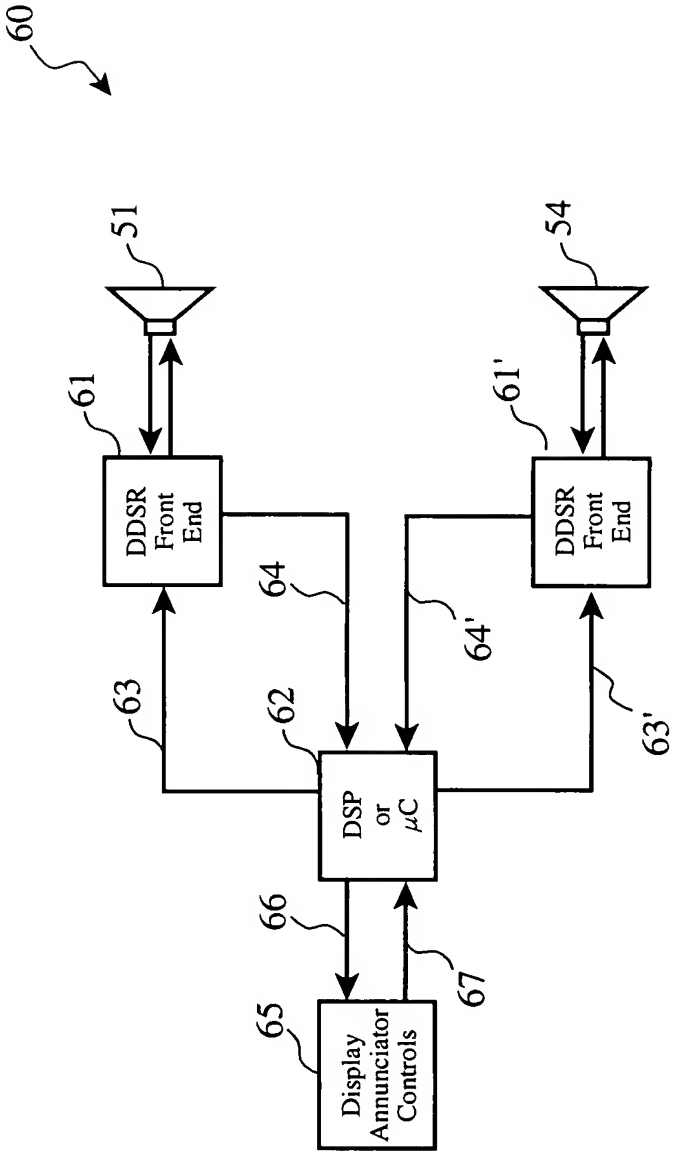
60
51
54
61
61'
DDSR Front End
DDSR Front End
64
64'
63
62
63'
DSP or μC
66
67
65
Display Annunciator Controls

Figure 6

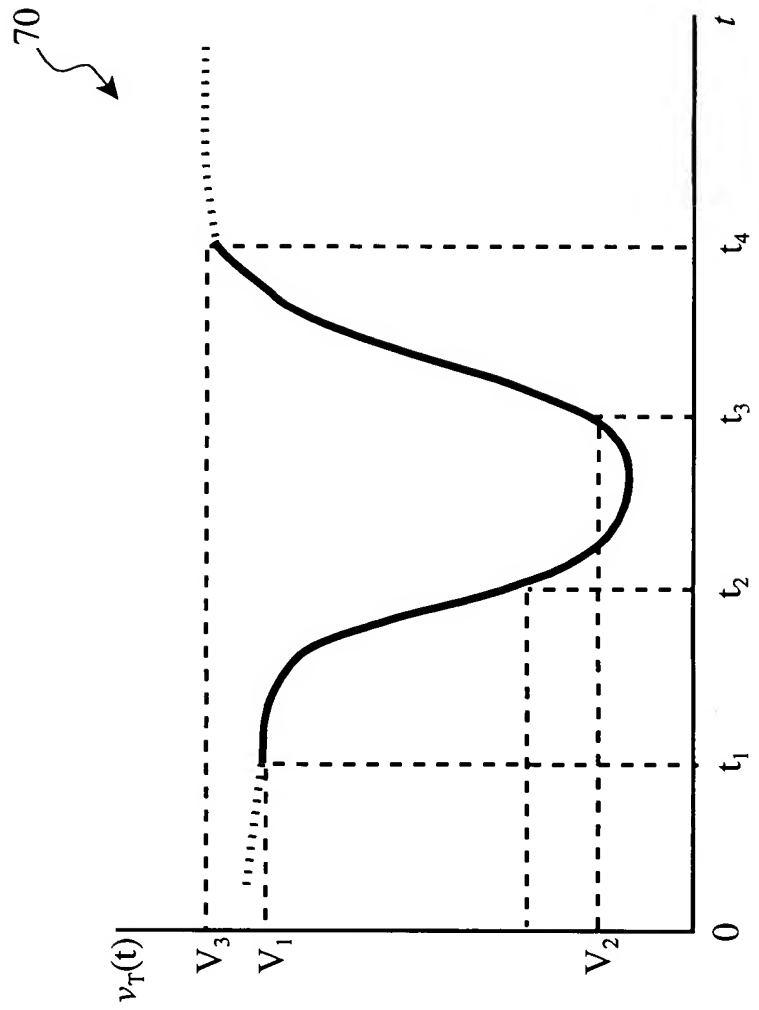

Figure 7

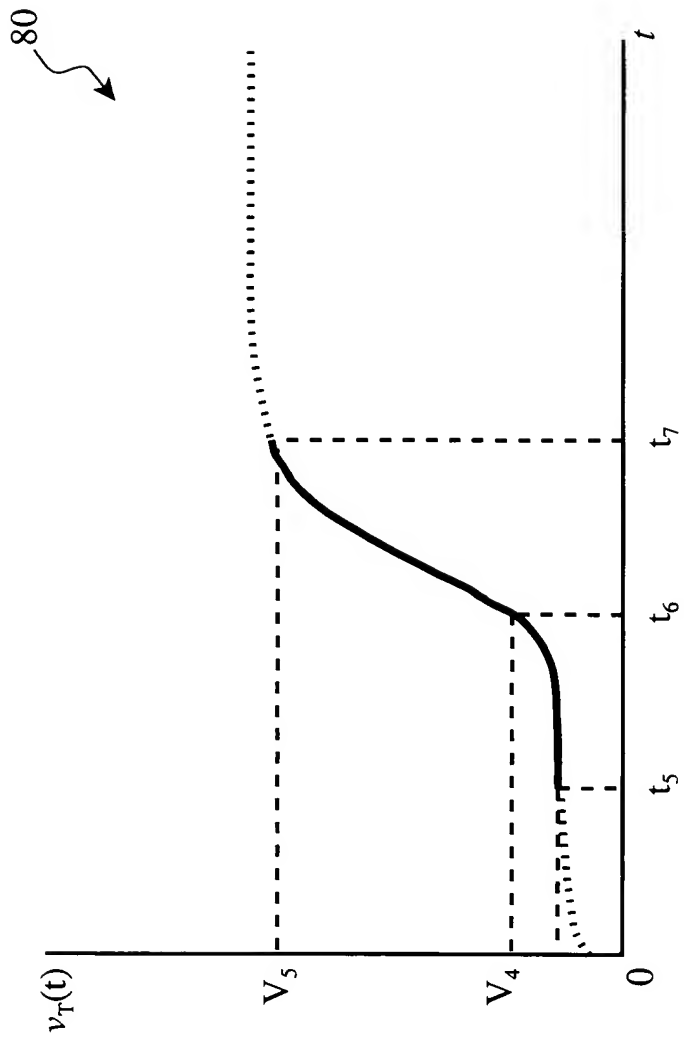

Figure 8

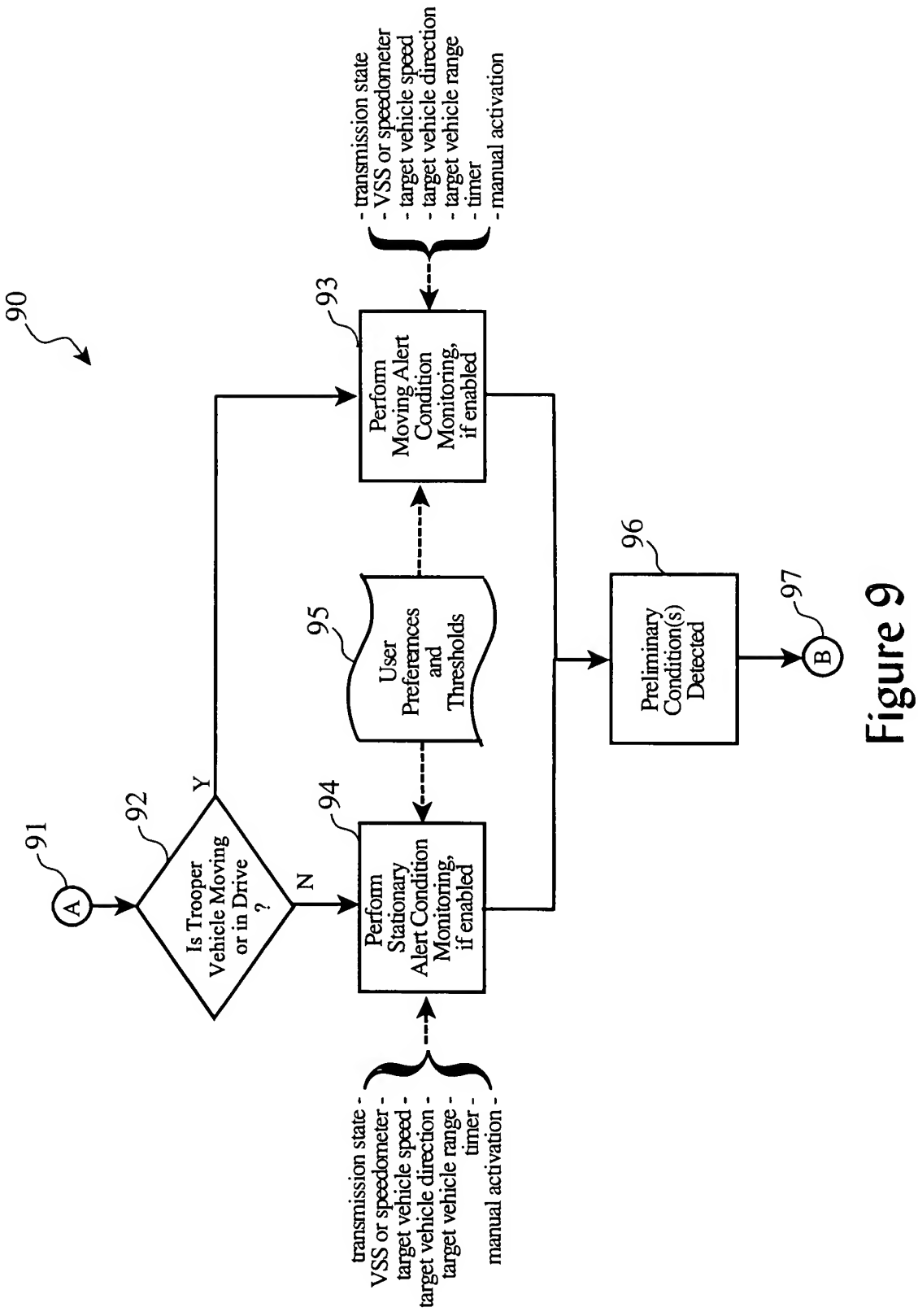
90
91
A
92
Is Trooper Vehicle Moving or in Drive ?
Y
N
93
Perform Moving Alert Condition Monitoring, if enabled
94
Perform Stationary Alert Condition Monitoring, if enabled
95
User Preferences and Thresholds
96
Preliminary Condition(s) Detected
97
B
- transmission state
- VSS or speedometer
- target vehicle speed
- target vehicle direction
- target vehicle range
- timer
- manual activation
transmission state -
VSS or speedometer -
target vehicle speed -
target vehicle direction -
target vehicle range -
timer -
manual activation -

Figure 9

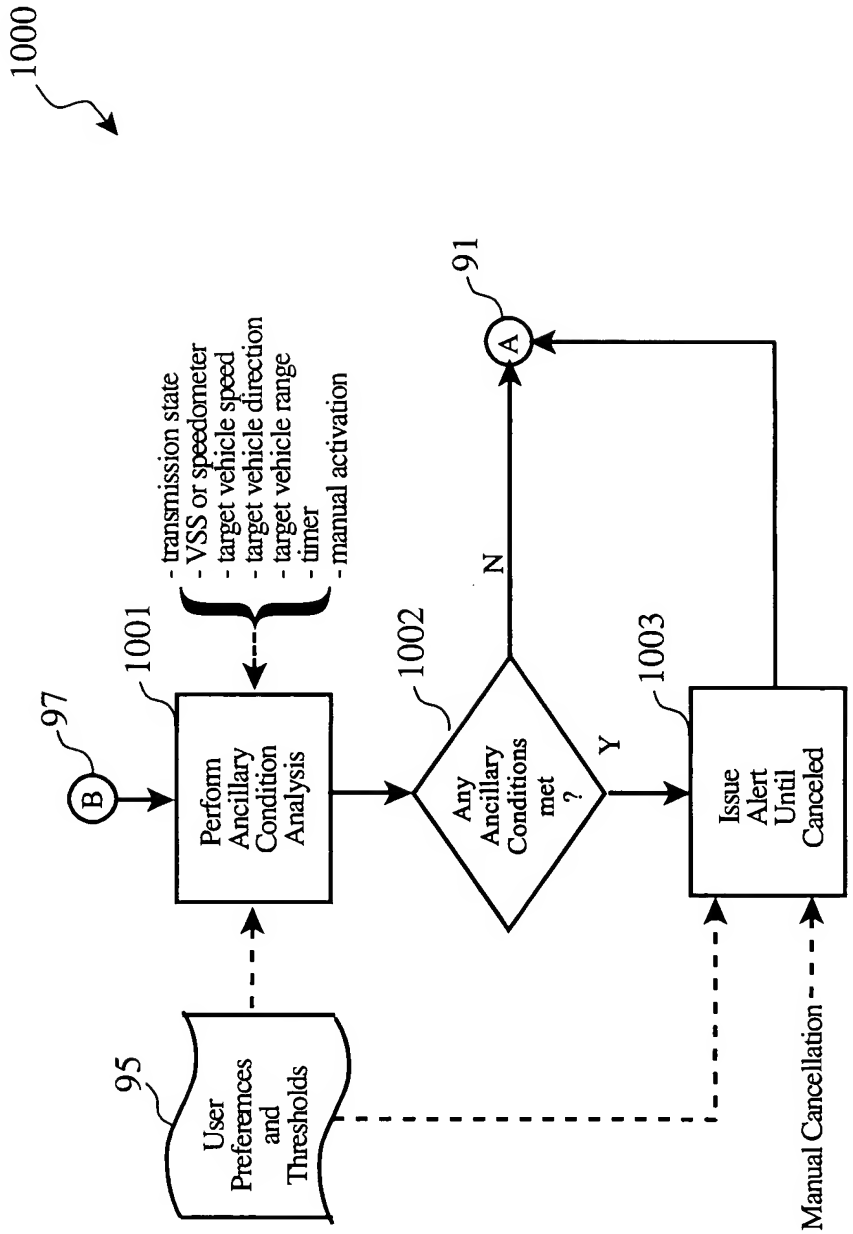
1000
97
B
1001
Perform Ancillary Condition Analysis
- transmission state
- VSS or speedometer
- target vehicle speed
- target vehicle direction
- target vehicle range
- timer
- manual activation
1002
Any Ancillary Conditions met ?
N
Y
91
A
1003
Issue Alert Until Canceled
95
User Preferences and Thresholds
Manual Cancellation

Figure 10

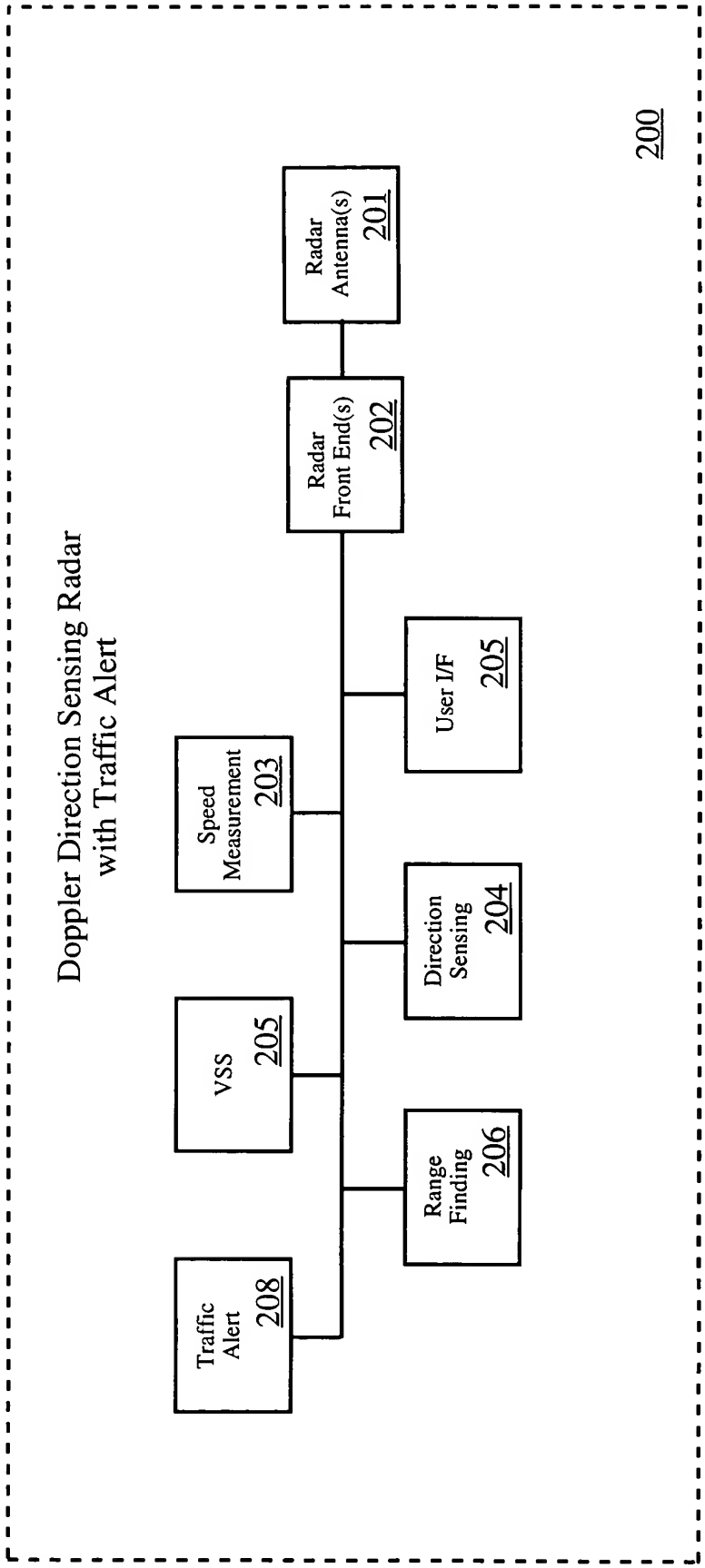
Doppler Direction Sensing Radar
with Traffic Alert
200
Radar Antenna(s) 201
Radar Front End(s) 202
Speed Measurement 203
User I/F 205
VSS 205
Direction Sensing 204
Range Finding 206
Traffic Alert 208

Figure 11

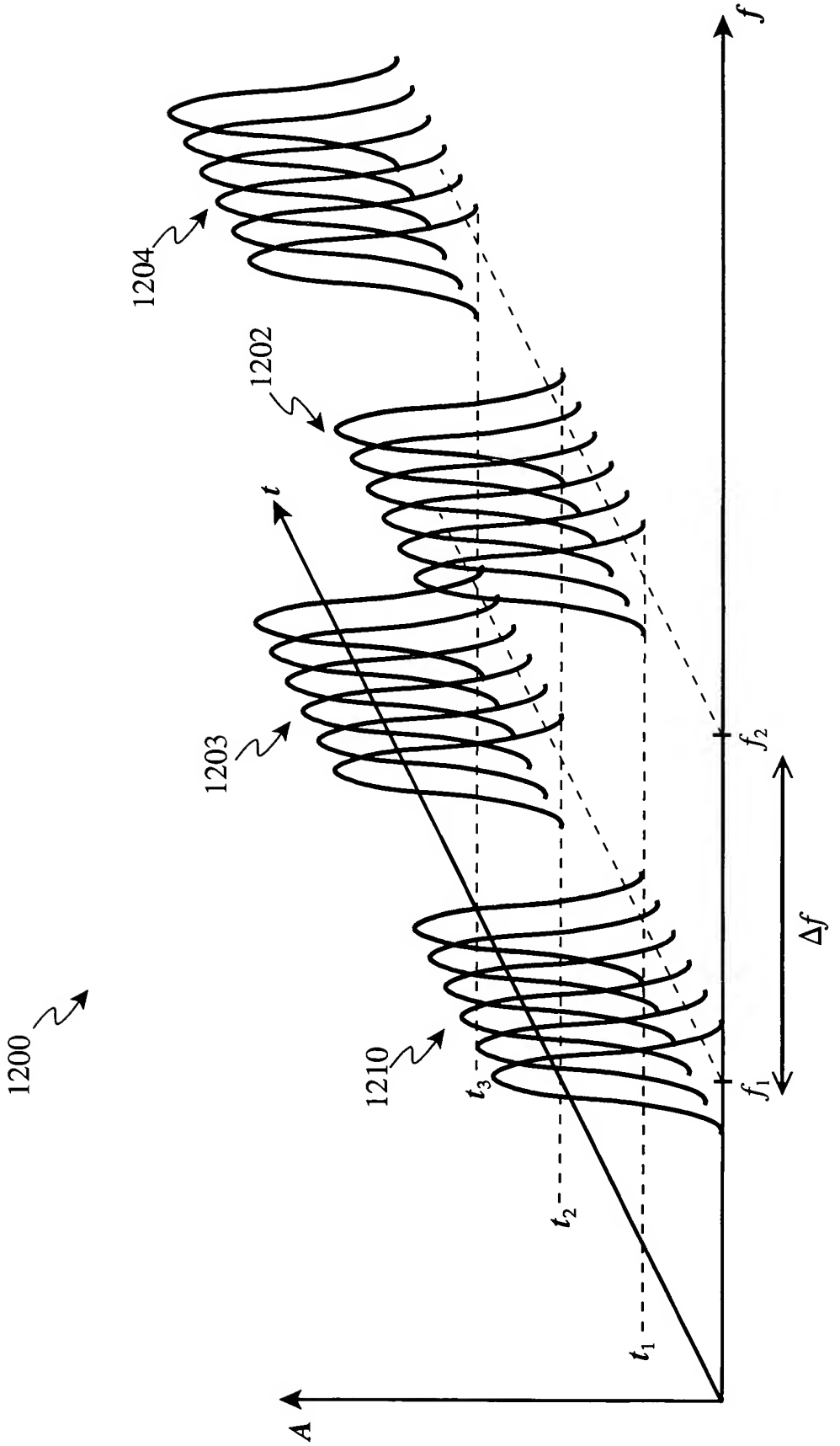

Figure 12